

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) An isolated protein having glucosyltransferase activity comprising an amino acid sequence, which exhibits at least ~~60%~~ 90% amino acid ~~activity~~ identity, as determined by ~~the~~ BLAST algorithm, with ~~the~~ amino acid sequence 531-1781 of SEQ ID No. 2.

2-5. (canceled)

6. (currently amended) The isolated protein according to claim 1, which exhibits at least ~~70%~~ 90% amino acid identity with the amino acid sequence of SEQ ID No. 2.

7. (currently amended) The isolated protein according to claim 1, comprising an amino acid sequence of at least 200 amino acids which exhibits at least ~~55%~~ 90% amino acid identity with the corresponding part of the amino acid sequence 972-1514 of SEQ ID No. 2.

8. (canceled)

9. (currently amended) The isolated protein according to claim 1, comprising an amino acid sequence of at least 100 amino acids exhibiting at least ~~50%~~ 90% amino acid identity with the corresponding part of the amino acid sequence 1515-1781 of SEQ ID No. 2.

10. (canceled)

11. (previously presented) The isolated protein according to claim 1, comprising at least one of the amino acids Pro-1026, Ile-1029, Met-1034, Asn-1035, Ser-1136, Ala-1143, Ile-1168, Leu-1223, Ala-1413, Val-1418, Ala-1428, Leu-1442 in the same relative position as the corresponding amino acids of the amino acid sequence of SEQ ID No. 2.

12. (currently amended) The isolated protein according to claim 1 which, in the presence of sucrose, produces a glucan having 38-48% 4-linked anhydroglucose units, 17-28% 6-linked anhydroglucose units, and 7-20% ~~4,6-linked~~ 4,6-linked anhydroglucose units.

13. (currently amended) The isolated protein according to claim 1, ~~which~~ wherein said protein is a recombinant protein.

14-23. (canceled)

24. (currently amended) An isolated protein having glucosyltransferase activity comprising an amino acid sequence, which exhibits at least ~~70%~~ 90% amino acid identity, as determined by the BLAST algorithm, with the amino acid sequence 531-1781 of SEQ ID No. 2, and comprising an amino acid sequence of about 200 amino acids which exhibits at least ~~65%~~ 90% amino acid identity with the corresponding part of the amino acid sequence 972-1514 of SEQ ID No. 2, and comprising an amino acid sequence of at least 100 amino acids exhibiting at least ~~60%~~ 90% amino acid identity with the corresponding part of the amino acid sequence 1515-1781 of SEQ ID No. 2.

25. (currently amended) An isolated protein having glucosyltransferase activity comprising an amino acid sequence, which exhibits at least ~~70%~~ 90% amino acid identity, as determined by the BLAST algorithm, with the amino acid sequence 531-1781 of SEQ ID No. 2, and comprising an amino acid sequence of about 543 amino acids which exhibits at least ~~65%~~ 90% amino acid identity with the corresponding part of the amino acid sequence 972-1514 of SEQ ID No. 2, and comprising an amino acid sequence of at least 100 amino acids exhibiting at least ~~60%~~ 90%

amino acid identity with the corresponding part of the amino acid sequence 1515-1781 of SEQ ID No. 2.

26. (new) An isolated protein having glucosyltransferase activity comprising an amino acid sequence 531-1781 of SEQ ID NO: 2.

27. (new) The isolated protein according to claim 26, comprising an amino acid sequence of SEQ ID NO: 2.

28. (new) The isolated protein according to claim 26, wherein in the presence of sucrose, a glucan is produced having 38-48% 4-linked anhydroglucose units, 17-28% 6-linked anhydroglucose units, and 7-20% 4,6-linked anhydroglucose units.